

PLEASE NOTE -

* Copies not attached as previously submitted to or cited by the USPTO in parent application US 10/120,350



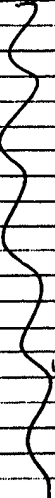
PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/713,094
		Filing Date	11/17/2003
		First Named Inventor	Kia Silverbrook
		Art Unit	2853
		Examiner Name	AN DO
Sheet	1	of	8
		Attorney Docket Number	ZG004US

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US 5,130,967 *	10.10.2000	Lee et al	
		US 5,675,719 *	10.07.1997	Mattias	
		US 6,229,622 *	05.08.2001	Takeda	
		US 5,719,604	02.17.1998	Inui et al	
		US 5,666,141	09.09.1997	Matoba et al	
		US 4,672,398	06.09.1987	Kuwabara et al	
		US 4,737,802	04.12.1988	Mielke	
		US 5,029,805	07.09.1991	Albarda et al	
		US 5,258,774	11.02.1993	Rogers	
		US 4,553,393	11.19.1985	Ruoff	
		US 4,864,824	09.12.1989	Gabriel et al	
		US 4,423,401	12.27.1983	Mueller	
		US-			
		US-			
		US-			
US-					
US-					
US-					
US-					
US-					
US-					

FOREIGN PATENT DOCUMENTS							
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴ - Kind Code ⁵ (if known)				
[Signature]		EP	0 713 774	05.29.1996	Sharp Kabushiki Kaisha		
		DE	195 16 997	11.16.1995	Sharp K.K		
		DE	196 23 620	12.19.1996	Sharp K.K		
		JP	2-108544 (Abstract)	04.20.1990	Seiko Epson Corp		
		JP	2-92643 (Abstract)	04.03.1990	Seiko Epson Corp		
		JP	4-353458 (Abstract)	12.08.1992	Brother Ind Ltd		
		JP	6-91865 (Abstract)	04.05.1994	Seikosha Co Ltd		
		JP	6-91866 (Abstract)	04.05.1994	Seikosha Co Ltd		
		JP	2-265752 (Abstract)	10.30.1990	Matsushita Electronic Ind Co Ltd		
		EP	0 634 273	01.18.1995	Sharp Kabushiki Kaisha		

Examiner Signature	[Signature]	Date Considered	11/22/05
-----------------------	-------------	--------------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

* Copies not attached as previously submitted to or cited by the USPTO in parent application US 10/120,350

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

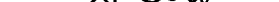
* Copies not attached as previously submitted to or cited by the USPTO in parent application US 10/120,350

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10173094
				Filing Date	11/17/2003
				First Named Inventor	Kia Silverbrook
				Art Unit	2853
				Examiner Name	HN DO
Sheet	3	of	8	Attorney Docket Number	ZG004US

[illegible]

FOREIGN PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
JP ↓ JP	2	JP 02 162049 (Abstract)	06.21.1990	Seiko Epson Corp		2
		DE 32 45 283	06.07.1984	Siemens AG		
		JP 04 368851 (Abstract)	12.21.1992	Seiko Epson Corp		
		JP 02 158348 (Abstract)	06.18.1990	Minolta Camera Co Ltd		
		JP 03.112662 (Abstract)	05.14.1991	Seiko Epson Corp		
		JP 03.653348 (Abstract)	03.20.1991	Matsushita Electric Ind.Co		
		EP 0 431 338	06.12.1991	Matsushita Electric Ind.Co		
		JP 01.257058	10.13.1989	Seiko Epson Corp		
	DE 195-17-969	11.30.1995	Sharp K.K			

Examiner Signature		Date Considered	11/22/05
-----------------------	---	--------------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

class/
sub.

PLEASE NOTE -

* Copies not attached as previously submitted to or cited by the USPTO in parent application US 10/120,350

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/713,094
		Filing Date	11/17/2003
		First Named Inventor	Kia Silverbrook
		Art Unit	2853
		Examiner Name	AN DO
Sheet 4 of 8	Attorney Docket Number	ZG004US	

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No. 1	Document Number Number - Kind Code 2 (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS					
Examiner Initials	Cite No. 1	Foreign Patent Document Country Code 3 - Number 4 - Kind Code 5 (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		DE 196 39 717	04.17.1997	Sharp K.K.	
		EP 0 737 580	10.16.1996	Canon K.K.	
		EP 0 882 590	12.09.1998	Canon K.K.	
		EP 0 478 956	04.08.1992	Kernforschungs-Gesellschaft Karlsruhe GmbH	
		DE 1 648 322	03.24.1971	VDO Tachometerwerke GmbH	
		GB 1 428 239	03.17.1976	Cibie Projecteurs	
		DE 39 34 280	04.26.1990	CAE di Cipelletti Alberto	
		DE 29 05 063	08.14.1980	Olympia Werke AG	
		WO 94/18010	08.18.1994	Domino Printing Sciences PLC	

Examiner Signature	<i>Julio</i>	Date Considered	11/22/05
--------------------	--------------	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

class/
sub.
~

* Copies not attached as previously submitted to or cited by the USPTO in parent application US 10/120,350








Approved for use through 10/31/2002. OMB 0651-0031


U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/713,094
				Filing Date	11/17/2003
				First Named Inventor	Kia Silverbrook
				Art Unit	2853
				Examiner Name	AN DO
Sheet	5	of	8	Attorney Docket Number	ZG004US

[illegible]

FOREIGN PATENT DOCUMENTS						
Examiner Initials ³	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
      	2	EP 0 398 031	11.22.1990	Seiko Epson Corp		2
	2	EP 0 427 291	05.15.1991	Seiko Epson Corp		2
	2	JP 01-115639 (Abstract)	05:08:1989	Ricoh Co Ltd		2
	2	JP 58-116165 (Abstract)	07:11:1983	Canon K.K		2
	2	EP 0 627 314	12:07:1994	Olivetti Canon Ind SPA		2
	2	JP 61 268453 (Abstract)	11:27:1986	Olympus Optical Co Ltd		2
	2	JP 04 118241 (Abstract)	04.20.1992	Seiko Epson Corp		2
	2	EP 0 506 232	09.30.1992	Videojet Systems Int, Inc		2
	2	JP 07 314665 (Abstract)	12.05.1995	Canon Inc		2
	2	JP 03 180350	08.06.1991	Seiko Epson Corp		2

Examiner Signature		Date Considered	11/22/05
--------------------	---	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Class/
Sub.

PLEASE NOTE -

* Copies not attached as previously submitted to or cited by the USPTO in parent application US 10/120,350

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/713,094		
		Filing Date	11/17/2003		
		First Named Inventor	Kia Silverbrook		
		Art Unit	2853		
		Examiner Name	AN DO		
Sheet	6	of	8	Attorney Docket Number	ZG004US

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	2	WO 97 12689	04.10.1997	The Board of Trustees of the Leland Stanford University		2
	2	JP 02 050841 (Abstract)	02.20.1990	Seiko Epson Corp		
	2	EP 0 510 648	10.28.1992	Ivri Yehuda		
	2	JP 05 28765 (Abstract)	10.29.1993	Canon Inc		
	2	JP 04 141429 (Abstract)	05.14.1992	Seiko Epson Corp		
	2	JP 01 105746 (Abstract)	04.24.1989	Ricoh Co., Ltd		
	2	GB 792 145	03.19.1958	Technograph Printed Circuits Ltd		
	2	EP 0 750 993	01.02.1997	Canon K.K		

Examiner Signature		Date Considered	11/22/05
--------------------	---	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.






* Copies not attached as previously submitted to or cited by the USPTO in parent application US 10/120,350


Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

[illegible]

FOREIGN PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		JP 01 306254 (Abstract)	12.11.1989	Seiko Epson Corp.		
		EP 0 092 229	10.26.1983	Siemens AG		
		DE 37 16.996	12.08.1988	VDO Schindling		
		DE 34.30.155	02.27.1986	Siemens AG		
		FR 2 231.076	12.20.1974	Electricite De France		
		EP 940975 *	09.08.1999	Seiko Epson Corp.		
		EP 899684 *	03.03.1999	Seiko Epson Corp.		
		EP 540338 *	01.28.1998	Canon Kabushiki Kaisha		
		JP 40 4001051 *	01.06.1992	Ricoh Co Ltd		
						

Examiner Signature		Date Considered	11/22/05
--------------------	---	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

performance and not considered. Include copy of this form with each communication.
 1 Applicant's unique citation designation number (optional). 2 See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

class/
sub.

PLEASE NOTE -

* Copies not attached as previously submitted to or cited by the USPTO in parent application US 10/120,350

PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/7/3094
		Filing Date	11/17/2003
		First Named Inventor	Kia Silverbrook
		Group Art Unit	2853
		Examiner Name	ANJ DO
Sheet 8 of 8	Attorney Docket Number	ZG004US	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		NOWOROLSKI, J. MARK et al, "Process for in-plane and out-of-plane single-crystal-silicon thermal microactuators". Sensors and Actuators, A, CH, Elsevier-Sequoia-S-A, Lausanne, Vol-55, no-1, 15-July-1996, pp-65-69, XP004077979 ISSN: 0924-4247.	2
		ATAKA, MANABU et al, "Fabrication and Operation of Polymide-Bimorph Actuators for Ciliary Motion System". Journal of Microelectromechanical Systems, US, IEEE Inc. New York, Vol. 2, no. 4, 1 December 1993, pp 146-150, XP000443412, ISSN: 1057-7157.	
		YAMAGATA, YUTAKA et al, "A Micro Mobile Mechanism Using Thermal Expansion and its Theoretical Analysis". Proceeding of the workshop on micro electro mechanical systems (MEMS), US, New York, IEEE, Vol. Workshop 7, 25 January-1994, pp-142-147, XP000528408, ISBN: 0-7803-1834-X.	
		Derwent Abstract Accession No. 2001-020348/03, Class P75; T01, JP 2000-293335-A (SEIKO EPSON CORPORATION) 20-October-2000.*	
		Derwent Abstract Accession No. 98-081618/08, Class W02, JP 09-314915 A (CANON KABUSHIKI KAISHA) 9-December-1997.*	

Examiner Signature		Date Considered	11/22/05
--------------------	--	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

class/
sub.